

SEQUENCE LISTING

- 5 (1) GENERAL INFORMATION:
- (i) APPLICANT: GOELET, PHILIP
KNAPP, MICHAEL R.
- 10 (ii) TITLE OF INVENTION: SINGLE NUCLEOTIDE POLYMORPHISMS AND
THEIR USE IN GENETIC ANALYSIS
- (iii) NUMBER OF SEQUENCES: 95
- 15 (iv) CORRESPONDENCE ADDRESS:
(A) ADDRESSEE: HOWREY & SIMON
(B) STREET: 1299 PENNSYLVANIA AVENUE, N.W.
(C) CITY: WASHINGTON
(D) STATE: D.C.
(E) COUNTRY: US
20 (F) ZIP: 20004
- (v) COMPUTER READABLE FORM:
(A) MEDIUM TYPE: Floppy disk
(B) COMPUTER: IBM PC compatible
25 (C) OPERATING SYSTEM: PC-DOS/MS-DOS
(D) SOFTWARE: PatentIn Release #1.0, Version #1.25
- (vi) CURRENT APPLICATION DATA:
(A) APPLICATION NUMBER: US
30 (B) FILING DATE:
(C) CLASSIFICATION:
- (viii) ATTORNEY/AGENT INFORMATION:
(A) NAME: AUERBACH, JEFFREY I
35 (B) REGISTRATION NUMBER: 32,680
(C) REFERENCE/DOCKET NUMBER: 683-104-CIP
- (ix) TELECOMMUNICATION INFORMATION:
(A) TELEPHONE: (202) 383-7451
40 (B) TELEFAX: (202) 383-6610
- (2) INFORMATION FOR SEQ ID NO:1:
- 45 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
- 50 (ii) MOLECULE TYPE: DNA (genomic)
- (iii) HYPOTHETICAL: NO
- (iv) ANTI-SENSE: NO

(vi) ORIGINAL SOURCE:
 (A) ORGANISM: Equus caballus

5 (vii) IMMEDIATE SOURCE:
 (B) CLONE: 177-2

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:

10 GCAGCTCTAA GTGCTGTGGG 20

(2) INFORMATION FOR SEQ ID NO:2:

15 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 20 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: single
 (D) TOPOLOGY: linear

20 (ii) MOLECULE TYPE: DNA (genomic)

(iii) HYPOTHETICAL: NO

(iv) ANTI-SENSE: NO

25 (vi) ORIGINAL SOURCE:
 (A) ORGANISM: Equus caballus

(vii) IMMEDIATE SOURCE:
 (B) CLONE: 177-2

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:

TGCAGAAATT CTAAGGTGTT 20

35 (2) INFORMATION FOR SEQ ID NO:3:

40 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 20 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: single
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: DNA (genomic)

45 (iii) HYPOTHETICAL: NO

(iv) ANTI-SENSE: NO

50 (vi) ORIGINAL SOURCE:
 (A) ORGANISM: Equus caballus

(vii) IMMEDIATE SOURCE:
 (B) CLONE: 177-2

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:

AACACCTTAG AATTTCTGCA

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5 (2) INFORMATION FOR SEQ ID NO:4:

(i) SEQUENCE CHARACTERISTICS:

- 10 (A) LENGTH: 20 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: DNA (genomic)

15 (iii) HYPOTHETICAL: NO

(iv) ANTI-SENSE: NO

20 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Equus caballus

(vii) IMMEDIATE SOURCE:
(B) CLONE: 177-2

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4:

CCCACAGCAC TTAGAGCTGC

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30 (2) INFORMATION FOR SEQ ID NO:5:

(i) SEQUENCE CHARACTERISTICS:

- 35 (A) LENGTH: 20 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: DNA (genomic)

(iii) HYPOTHETICAL: NO

40 (iv) ANTI-SENSE: NO

(vi) ORIGINAL SOURCE:
(A) ORGANISM: Equus caballus

45 (vii) IMMEDIATE SOURCE:
(B) CLONE: 595-3

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:5:

50 AGCTCTGGGA TGATCCACTA

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(2) INFORMATION FOR SEQ ID NO:6:

- 5 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
- 10 (ii) MOLECULE TYPE: DNA (genomic)
(iii) HYPOTHETICAL: NO
(iv) ANTI-SENSE: NO
- 15 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Equus caballus
- 20 (vii) IMMEDIATE SOURCE:
(B) CLONE: 595-3
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:6:

TGAGGGAAAA ATGATGATGC

20

25 (2) INFORMATION FOR SEQ ID NO:7:

- 30 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
- 35 (ii) MOLECULE TYPE: DNA (genomic)
(iii) HYPOTHETICAL: NO
(iv) ANTI-SENSE: NO
- 40 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Equus caballus
- 45 (vii) IMMEDIATE SOURCE:
(B) CLONE: 595-3
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:7:

GCATCATCAT TTTCCCTCA

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(2) INFORMATION FOR SEQ ID NO:8:

5 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

10 (ii) MOLECULE TYPE: DNA (genomic)

(iii) HYPOTHETICAL: NO

(iv) ANTI-SENSE: NO

15 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Equus caballus

(vii) IMMEDIATE SOURCE:
(B) CLONE: 595-3

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO:8:

25 TAGTGGATCA TCCCAGAGCT

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(2) INFORMATION FOR SEQ ID NO:9:

30 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

35 (ii) MOLECULE TYPE: DNA (genomic)

(iii) HYPOTHETICAL: NO

(iv) ANTI-SENSE: NO

40 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Equus caballus

(vii) IMMEDIATE SOURCE:
(B) CLONE: 090-2

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:9:

AAACTAATT TGATGGCCAT

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(2) INFORMATION FOR SEQ ID NO:10:

- 5 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
- 10 (ii) MOLECULE TYPE: DNA (genomic)
(iii) HYPOTHETICAL: NO
(iv) ANTI-SENSE: NO
- 15 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Equus caballus
- 20 (vii) IMMEDIATE SOURCE:
(B) CLONE: 090-2
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:10:

AAAGTCAGAA CAATGATTGC

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25

(2) INFORMATION FOR SEQ ID NO:11:

- 30 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
- 35 (ii) MOLECULE TYPE: DNA (genomic)
(iii) HYPOTHETICAL: NO
(iv) ANTI-SENSE: NO
- 40 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Equus caballus
- 45 (vii) IMMEDIATE SOURCE:
(B) CLONE: 090-2
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:11:

GCAATCATTG TTCTGACTTT

20

(2) INFORMATION FOR SEQ ID NO:12:

5 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

10 (ii) MOLECULE TYPE: DNA (genomic)

(iii) HYPOTHETICAL: NO

(iv) ANTI-SENSE: NO

15 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Equus caballus

(vii) IMMEDIATE SOURCE:
(B) CLONE: 090-2

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO:12:

25 ATGGCCATCA AATTAGTTTT

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(2) INFORMATION FOR SEQ ID NO:13:

30 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

35 (ii) MOLECULE TYPE: DNA (genomic)

(iii) HYPOTHETICAL: NO

(iv) ANTI-SENSE: NO

40 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Equus caballus

(vii) IMMEDIATE SOURCE:
(B) CLONE: 324-1

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO:13:

CACAAGGCCCC AAGAACAGGA

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(2) INFORMATION FOR SEQ ID NO:14:

5 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

10 (ii) MOLECULE TYPE: DNA (genomic)

(iii) HYPOTHETICAL: NO

(iv) ANTI-SENSE: NO

15 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Equus caballus

(vii) IMMEDIATE SOURCE:
(B) CLONE: 324-1

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO:14:

25 TGAGTTCAGC GAGTGTCTAGA

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(2) INFORMATION FOR SEQ ID NO:15:

30 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

35 (ii) MOLECULE TYPE: DNA (genomic)

(iii) HYPOTHETICAL: NO

(iv) ANTI-SENSE: NO

40 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Equus caballus

(vii) IMMEDIATE SOURCE:
(B) CLONE: 324-1

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO:15:

TCTGACACTC GCTGAACTCA

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(2) INFORMATION FOR SEQ ID NO:16:

5 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

10 (ii) MOLECULE TYPE: DNA (genomic)

(iii) HYPOTHETICAL: NO

(iv) ANTI-SENSE: NO

15 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Equus caballus

(vii) IMMEDIATE SOURCE:
(B) CLONE: 324-1

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO:16:

25 TCCTGTTCTT GGCCTTGTG 20

(2) INFORMATION FOR SEQ ID NO:17:

30 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

35 (ii) MOLECULE TYPE: DNA (genomic)

(iii) HYPOTHETICAL: NO

(iv) ANTI-SENSE: NO

40 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Equus caballus

(vii) IMMEDIATE SOURCE:
(B) CLONE: 129-1

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO:17:

TGGGAAAGAC CACATTATTT 20

(2) INFORMATION FOR SEQ ID NO:18:

5 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

10 (ii) MOLECULE TYPE: DNA (genomic)

(iii) HYPOTHETICAL: NO

(iv) ANTI-SENSE: NO

15 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Equus caballus

(vii) IMMEDIATE SOURCE:
(B) CLONE: 129-1

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO:18:

25 GTTCCCTTTT GTTTCAGACC

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(2) INFORMATION FOR SEQ ID NO:19:

30 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

35 (ii) MOLECULE TYPE: DNA (genomic)

(iii) HYPOTHETICAL: NO

(iv) ANTI-SENSE: NO

40 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Equus caballus

(vii) IMMEDIATE SOURCE:
(B) CLONE: 129-1

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO:19:

GGTCTGAAAC AAAAGGGAAC

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(2) INFORMATION FOR SEQ ID NO:20:

5 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

10 (ii) MOLECULE TYPE: DNA (genomic)

(iii) HYPOTHETICAL: NO

(iv) ANTI-SENSE: NO

15 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Equus caballus

(vii) IMMEDIATE SOURCE:
(B) CLONE: 129-1

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO:20:

25 AAATAATGTG GTCTTTCCCA

20

(2) INFORMATION FOR SEQ ID NO:21:

30 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

35 (ii) MOLECULE TYPE: DNA (genomic)

(iii) HYPOTHETICAL: NO

(iv) ANTI-SENSE: NO

40 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Equus caballus

(vii) IMMEDIATE SOURCE:
(B) CLONE: 007-1

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO:21:

CATGAGTAAG AAGCATCCGG

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(2) INFORMATION FOR SEQ ID NO:22:

5 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

10 (ii) MOLECULE TYPE: DNA (genomic)

(iii) HYPOTHETICAL: NO

(iv) ANTI-SENSE: NO

15 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Equus caballus

(vii) IMMEDIATE SOURCE:
(B) CLONE: 007-1

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO:22:

25 CCATGGAGTC ATAGATAAGT

20

(2) INFORMATION FOR SEQ ID NO:23:

30 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

35 (ii) MOLECULE TYPE: DNA (genomic)

(iii) HYPOTHETICAL: NO

(iv) ANTI-SENSE: NO

40 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Equus caballus

(vii) IMMEDIATE SOURCE:
(B) CLONE: 007-1

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO:23:

ACTTATCTAT GACTCCATGG

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(2) INFORMATION FOR SEQ ID NO:24:

5 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

10 (ii) MOLECULE TYPE: DNA (genomic)

(iii) HYPOTHETICAL: NO

(iv) ANTI-SENSE: NO

15 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Equus caballus

(vii) IMMEDIATE SOURCE:
(B) CLONE: 007-1

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO:24:

25 CCGGATGCTT CTTACTCATG 20

(2) INFORMATION FOR SEQ ID NO:25:

30 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

35 (ii) MOLECULE TYPE: DNA (genomic)

(iii) HYPOTHETICAL: NO

(iv) ANTI-SENSE: NO

40 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Equus caballus

(vii) IMMEDIATE SOURCE:
(B) CLONE: 324-2

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO:25:

CCCAAGAACA GGATTGAGTT 20

(2) INFORMATION FOR SEQ ID NO:26:

5 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

10 (ii) MOLECULE TYPE: DNA (genomic)

(iii) HYPOTHETICAL: NO

(iv) ANTI-SENSE: NO

15 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Equus caballus

(vii) IMMEDIATE SOURCE:
(B) CLONE: 324-2

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO:26:

25 AGCGAGTGTC AGAGTTGTGT

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(2) INFORMATION FOR SEQ ID NO:27:

30 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

35 (ii) MOLECULE TYPE: DNA (genomic)

(iii) HYPOTHETICAL: NO

(iv) ANTI-SENSE: NO

40 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Equus caballus

(vii) IMMEDIATE SOURCE:
(B) CLONE: 324-2

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:27:

ACACAACTCT GACACTCGCT

20

(2) INFORMATION FOR SEQ ID NO:28:

- 5 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
- 10 (ii) MOLECULE TYPE: DNA (genomic)
(iii) HYPOTHETICAL: NO
(iv) ANTI-SENSE: NO
- 15 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Equus caballus
- 20 (vii) IMMEDIATE SOURCE:
(B) CLONE: 324-2
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:28:

AACTCAATCC TGTTCTTGGG

20

25

(2) INFORMATION FOR SEQ ID NO:29:

- 30 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
- 35 (ii) MOLECULE TYPE: DNA (genomic)
(iii) HYPOTHETICAL: NO
(iv) ANTI-SENSE: NO
- 40 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Equus caballus
- 45 (vii) IMMEDIATE SOURCE:
(B) CLONE: 177-3
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:29:

AGCAAGAAA TGGGGGGCCTT

20

(2) INFORMATION FOR SEQ ID NO:30:

5 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

10 (ii) MOLECULE TYPE: DNA (genomic)

(iii) HYPOTHETICAL: NO

(iv) ANTI-SENSE: NO

15 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Equus caballus

(vii) IMMEDIATE SOURCE:
(B) CLONE: 177-3

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO:30:

25 GTCCTACAAT TGCCAGGAAG

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(2) INFORMATION FOR SEQ ID NO:31:

30 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

35 (ii) MOLECULE TYPE: DNA (genomic)

(iii) HYPOTHETICAL: NO

(iv) ANTI-SENSE: NO

40 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Equus caballus

(vii) IMMEDIATE SOURCE:
(B) CLONE: 177-3

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO:31:

CTTCCTGGCA ATTGTAGGAC

20

(2) INFORMATION FOR SEQ ID NO:32:

5 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

10 (ii) MOLECULE TYPE: DNA (genomic)

(iii) HYPOTHETICAL: NO

(iv) ANTI-SENSE: NO

15 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Equus caballus

(vii) IMMEDIATE SOURCE:
(B) CLONE: 177-3

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO:32:

25 AAGGCCCCCC ATTTCTTGCT

20

(2) INFORMATION FOR SEQ ID NO:33:

30 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

35 (ii) MOLECULE TYPE: DNA (genomic)

(iii) HYPOTHETICAL: NO

(iv) ANTI-SENSE: NO

40 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Equus caballus

(vii) IMMEDIATE SOURCE:
(B) CLONE: 595-1

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:33:

GAATATCAAT ATATATATAT

20

(2) INFORMATION FOR SEQ ID NO:34:

5 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

10 (ii) MOLECULE TYPE: DNA (genomic)

(iii) HYPOTHETICAL: NO

(iv) ANTI-SENSE: NO

15 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Equus caballus

(vii) IMMEDIATE SOURCE:
(B) CLONE: 595-1

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO:34:

25 TGTGTGTGTG TGTATTTGCT 20

(2) INFORMATION FOR SEQ ID NO:35:

30 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

35 (ii) MOLECULE TYPE: DNA (genomic)

(iii) HYPOTHETICAL: NO

(iv) ANTI-SENSE: NO

40 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Equus caballus

(vii) IMMEDIATE SOURCE:
(B) CLONE: 595-1

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO:35:

AGCAAATACA CACACACACA 20

(2) INFORMATION FOR SEQ ID NO:36:

- 5 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
- 10 (ii) MOLECULE TYPE: DNA (genomic)
- (iii) HYPOTHETICAL: NO
- (iv) ANTI-SENSE: NO
- 15 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Equus caballus
- (vii) IMMEDIATE SOURCE:
(B) CLONE: 595-1
- 20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:36:

ATATATATAT ATTGATATTC

20

25 (2) INFORMATION FOR SEQ ID NO:37:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 base pairs
(B) TYPE: nucleic acid
30 (C) STRANDEDNESS: single
(D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA (genomic)
- 35 (iii) HYPOTHETICAL: NO
- (iv) ANTI-SENSE: NO
- (vi) ORIGINAL SOURCE:
40 (A) ORGANISM: Equus caballus
- (vii) IMMEDIATE SOURCE:
(B) CLONE: 007-3
- 45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:37:

GCCATAATTA AGCCTGTATT

20

(2) INFORMATION FOR SEQ ID NO:38:

5 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

10 (ii) MOLECULE TYPE: DNA (genomic)

(iii) HYPOTHETICAL: NO

(iv) ANTI-SENSE: NO

15 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Equus caballus

(vii) IMMEDIATE SOURCE:
(B) CLONE: 007-3

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:38:

25 GTTTGTTTGA AATTTTGTGA 20

(2) INFORMATION FOR SEQ ID NO:39:

30 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

35 (ii) MOLECULE TYPE: DNA (genomic)

(iii) HYPOTHETICAL: NO

(iv) ANTI-SENSE: NO

40 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Equus caballus

(vii) IMMEDIATE SOURCE:
(B) CLONE: 007-3

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:39:

TCACAAAATT TAAAACAAAC 20

(2) INFORMATION FOR SEQ ID NO:40:

- 5 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
- 10 (ii) MOLECULE TYPE: DNA (genomic)
(iii) HYPOTHETICAL: NO
(iv) ANTI-SENSE: NO
- 15 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Equus caballus
- 20 (vii) IMMEDIATE SOURCE:
(B) CLONE: 007-3
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:40:

AATACAGGCT TAATTATGGC

20

25

(2) INFORMATION FOR SEQ ID NO:41:

- 30 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
- 35 (ii) MOLECULE TYPE: DNA (genomic)
(iii) HYPOTHETICAL: NO
(iv) ANTI-SENSE: NO
- 40 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Equus caballus
- 45 (vii) IMMEDIATE SOURCE:
(B) CLONE: 459-1
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:41:

GTGTAGAGTA GTTCAAGGAC

20

(2) INFORMATION FOR SEQ ID NO:42:

5 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

10 (ii) MOLECULE TYPE: DNA (genomic)

(iii) HYPOTHETICAL: NO

(iv) ANTI-SENSE: NO

15 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Equus caballus

(vii) IMMEDIATE SOURCE:
(B) CLONE: 459-1

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:42:

25 ATGTCTTATA CCTCCCTTTT 20

(2) INFORMATION FOR SEQ ID NO:43:

30 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

35 (ii) MOLECULE TYPE: DNA (genomic)

(iii) HYPOTHETICAL: NO

(iv) ANTI-SENSE: NO

40 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Equus caballus

(vii) IMMEDIATE SOURCE:
(B) CLONE: 459-1

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:43:

AAAAGGGAGG TATAAGACAT 20

(2) INFORMATION FOR SEQ ID NO:44:

- 5 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
- 10 (ii) MOLECULE TYPE: DNA (genomic)
(iii) HYPOTHETICAL: NO
(iv) ANTI-SENSE: NO
- 15 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Equus caballus
- 20 (vii) IMMEDIATE SOURCE:
(B) CLONE: 459-1
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:44:

25 GTCCTTGAAC TACTCTACAC 20

(2) INFORMATION FOR SEQ ID NO:45:

- 30 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
- 35 (ii) MOLECULE TYPE: DNA (genomic)
(iii) HYPOTHETICAL: NO
(iv) ANTI-SENSE: NO
- 40 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Equus caballus
- 45 (vii) IMMEDIATE SOURCE:
(B) CLONE: 085-1
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:45:

GTGAACGGAG AGCAGGCCTT 20

(2) INFORMATION FOR SEQ ID NO:46:

- 5 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
- 10 (ii) MOLECULE TYPE: DNA (genomic)
(iii) HYPOTHETICAL: NO
(iv) ANTI-SENSE: NO
- 15 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Equus caballus
- 20 (vii) IMMEDIATE SOURCE:
(B) CLONE: 085-1

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:46:

25 CCTGCTGAAG CCTCAGACCG 20

(2) INFORMATION FOR SEQ ID NO:47:

- 30 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
- 35 (ii) MOLECULE TYPE: DNA (genomic)
(iii) HYPOTHETICAL: NO
(iv) ANTI-SENSE: NO
- 40 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Equus caballus
- 45 (vii) IMMEDIATE SOURCE:
(B) CLONE: 085-1

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:47:

CGGTCTGAGG CTTGAGCAGG 20

(2) INFORMATION FOR SEQ ID NO:48:

5 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

10 (ii) MOLECULE TYPE: DNA (genomic)

(iii) HYPOTHETICAL: NO

(iv) ANTI-SENSE: NO

15 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Equus caballus

(vii) IMMEDIATE SOURCE:
(B) CLONE: 085-1

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:48:

25 AAGGCCTGCT CTCCGTTAC

20

(2) INFORMATION FOR SEQ ID NO:49:

30 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

35 (ii) MOLECULE TYPE: DNA (genomic)

(iii) HYPOTHETICAL: NO

(iv) ANTI-SENSE: NO

40 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Equus caballus

(vii) IMMEDIATE SOURCE:
(B) CLONE: 007-2

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:49:

CTGCTCTTTA GACTATGACC

20

(2) INFORMATION FOR SEQ ID NO:50:

5 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

10 (ii) MOLECULE TYPE: DNA (genomic)

(iii) HYPOTHETICAL: NO

(iv) ANTI-SENSE: NO

15 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Equus caballus

(vii) IMMEDIATE SOURCE:
(B) CLONE: 007-2

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:50:

25 TCAACCTTGC ATCATGAGCT

20

(2) INFORMATION FOR SEQ ID NO:51:

30 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

35 (ii) MOLECULE TYPE: DNA (genomic)

(iii) HYPOTHETICAL: NO

(iv) ANTI-SENSE: NO

40 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Equus caballus

(vii) IMMEDIATE SOURCE:
(B) CLONE: 007-2

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:51:

AGCTCATGAT GCAAGGTTGA

20

(2) INFORMATION FOR SEQ ID NO:52:

- 5 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
- 10 (ii) MOLECULE TYPE: DNA (genomic)
(iii) HYPOTHETICAL: NO
(iv) ANTI-SENSE: NO
- 15 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Equus caballus
- 20 (vii) IMMEDIATE SOURCE:
(B) CLONE: 007-2
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:52:

GGTCATAGTC TAAAGAGCAG

20

25

(2) INFORMATION FOR SEQ ID NO:53:

- 30 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
- 35 (ii) MOLECULE TYPE: DNA (genomic)
(iii) HYPOTHETICAL: NO
(iv) ANTI-SENSE: NO
- 40 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Equus caballus
- 45 (vii) IMMEDIATE SOURCE:
(B) CLONE: 474-1
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:53:

TTTGAGCTGG GACCTCAGTC

20

(2) INFORMATION FOR SEQ ID NO:54:

- 5 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
- 10 (ii) MOLECULE TYPE: DNA (genomic)
(iii) HYPOTHETICAL: NO
(iv) ANTI-SENSE: NO
- 15 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Equus caballus
- 20 (vii) IMMEDIATE SOURCE:
(B) CLONE: 474-1
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:54:

25 TCTCCTGCCT TTAGACTCGA 20

(2) INFORMATION FOR SEQ ID NO:55:

- 30 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
- 35 (ii) MOLECULE TYPE: DNA (genomic)
(iii) HYPOTHETICAL: NO
(iv) ANTI-SENSE: NO
- 40 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Equus caballus
- 45 (vii) IMMEDIATE SOURCE:
(B) CLONE: 474-1
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:55:

TCGAGTCTAA AGGCAGGAGA 20

(2) INFORMATION FOR SEQ ID NO:56:

- 5 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
- 10 (ii) MOLECULE TYPE: DNA (genomic)
- (iii) HYPOTHETICAL: NO
- (iv) ANTI-SENSE: NO
- 15 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Equus caballus
- (vii) IMMEDIATE SOURCE:
(B) CLONE: 474-1
- 20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:56:

GACTGAGGTC CCAGCTCAA

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25

(2) INFORMATION FOR SEQ ID NO:57:

- 30 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA (genomic)
- 35 (iii) HYPOTHETICAL: NO
- (iv) ANTI-SENSE: NO
- 40 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Equus caballus
- (vii) IMMEDIATE SOURCE:
(B) CLONE: 178-1
- 45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:57:

GAACCTCTGG GCCGTGGATA

20

(2) INFORMATION FOR SEQ ID NO:58:

- 5 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
- 10 (ii) MOLECULE TYPE: DNA (genomic)
(iii) HYPOTHETICAL: NO
(iv) ANTI-SENSE: NO
- 15 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Equus caballus
- 20 (vii) IMMEDIATE SOURCE:
(B) CLONE: 178-1
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:58:

25 TTGTTTCAGAA GCACAGGTGA 20

(2) INFORMATION FOR SEQ ID NO:59:

- 30 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
- 35 (ii) MOLECULE TYPE: DNA (genomic)
(iii) HYPOTHETICAL: NO
(iv) ANTI-SENSE: NO
- 40 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Equus caballus
- 45 (vii) IMMEDIATE SOURCE:
(B) CLONE: 178-1
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:59:

TCACCTGTGC TTCTGAACAA 20

(2) INFORMATION FOR SEQ ID NO:60:

- 5 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
- 10 (ii) MOLECULE TYPE: DNA (genomic)
- (iii) HYPOTHETICAL: NO
- (iv) ANTI-SENSE: NO
- 15 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Equus caballus
- (vii) IMMEDIATE SOURCE:
(B) CLONE: 178-1
- 20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:60:

TATCCACGGC CCAGAGGTTC

20

25

(2) INFORMATION FOR SEQ ID NO:61:

- 30 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
- 35 (ii) MOLECULE TYPE: DNA (genomic)
- (iii) HYPOTHETICAL: NO
- (iv) ANTI-SENSE: NO
- 40 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Equus caballus
- (vii) IMMEDIATE SOURCE:
(B) CLONE: 595-2
- 45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:61:

GTATTTGCTA GCTCTGGGAT

20

(2) INFORMATION FOR SEQ ID NO:62:

- 5 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
- 10 (ii) MOLECULE TYPE: DNA (genomic)
(iii) HYPOTHETICAL: NO
(iv) ANTI-SENSE: NO
- 15 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Equus caballus
- 20 (vii) IMMEDIATE SOURCE:
(B) CLONE: 595-2
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:62:

ATCCACTAAT GAGGGAAAAA

20

25

(2) INFORMATION FOR SEQ ID NO:63:

- 30 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
- 35 (ii) MOLECULE TYPE: DNA (genomic)
(iii) HYPOTHETICAL: NO
(iv) ANTI-SENSE: NO
- 40 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Equus caballus
- 45 (vii) IMMEDIATE SOURCE:
(B) CLONE: 595-2
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:63:

TTTTTCCCTC ATTAGTGGAT

20

(2) INFORMATION FOR SEQ ID NO:64:

5 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

10 (ii) MOLECULE TYPE: DNA (genomic)

(iii) HYPOTHETICAL: NO

(iv) ANTI-SENSE: NO

15 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Equus caballus

(vii) IMMEDIATE SOURCE:
(B) CLONE: 595-2

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:64:

25 ATCCCAGAGC TAGCAAATAC

20

(2) INFORMATION FOR SEQ ID NO:65:

30 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

35 (ii) MOLECULE TYPE: DNA (genomic)

(iii) HYPOTHETICAL: NO

(iv) ANTI-SENSE: NO

40 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Equus caballus

(vii) IMMEDIATE SOURCE:
(B) CLONE: 177-1

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:65:

GAAGTTGTGG GACAGATGTG

20

(2) INFORMATION FOR SEQ ID NO:66:

5 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

10 (ii) MOLECULE TYPE: DNA (genomic)

(iii) HYPOTHETICAL: NO

(iv) ANTI-SENSE: NO

15 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Equus caballus

(vii) IMMEDIATE SOURCE:
(B) CLONE: 177-1

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:66:

25 AGAGATGCAG CTCTAAGTGC 20

(2) INFORMATION FOR SEQ ID NO:67:

30 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

35 (ii) MOLECULE TYPE: DNA (genomic)

(iii) HYPOTHETICAL: NO

(iv) ANTI-SENSE: NO

40 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Equus caballus

(vii) IMMEDIATE SOURCE:
(B) CLONE: 177-1

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:67:

GCACTTAGAG CTGCATCTCT 20

(2) INFORMATION FOR SEQ ID NO:68:

- 5 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
- 10 (ii) MOLECULE TYPE: DNA (genomic)
- (iii) HYPOTHETICAL: NO
- (iv) ANTI-SENSE: NO
- 15 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Equus caballus
- (vii) IMMEDIATE SOURCE:
(B) CLONE: 177-1
- 20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:68:

CACATCTGTC CCACAACTTC

20

25 (2) INFORMATION FOR SEQ ID NO:69:

- 30 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
- 35 (ii) MOLECULE TYPE: DNA (genomic)
- (iii) HYPOTHETICAL: NO
- (iv) ANTI-SENSE: NO
- 40 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Equus caballus
- (vii) IMMEDIATE SOURCE:
(B) CLONE: 459-2
- 45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:69:

CCATGAGGAA GCCTCCACAA

20

(2) INFORMATION FOR SEQ ID NO:70:

- 5 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
- 10 (ii) MOLECULE TYPE: DNA (genomic)
- (iii) HYPOTHETICAL: NO
- (iv) ANTI-SENSE: NO
- 15 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Equus caballus
- (vii) IMMEDIATE SOURCE:
(B) CLONE: 459-2
- 20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:70:

25 GTCCCAATAG TCTGGGATTC 20

(2) INFORMATION FOR SEQ ID NO:71:

- 30 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA (genomic)
- 35 (iii) HYPOTHETICAL: NO
- (iv) ANTI-SENSE: NO
- 40 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Equus caballus
- (vii) IMMEDIATE SOURCE:
(B) CLONE: 459-2
- 45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:71:

GAATCCCAGA CTATTGGGAC 20

(2) INFORMATION FOR SEQ ID NO:72:

5 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 20 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

10 (ii) MOLECULE TYPE: DNA (genomic)

(iii) HYPOTHETICAL: NO

(iv) ANTI-SENSE: NO

15 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Equus caballus

(vii) IMMEDIATE SOURCE:
(B) CLONE: 459-2
20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:72:

25 TTGTGGAGGC TTCCTCATGG 20

(2) INFORMATION FOR SEQ ID NO:73:

30 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 24 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

35 (ii) MOLECULE TYPE: DNA (genomic)

(iii) HYPOTHETICAL: NO

(iv) ANTI-SENSE: NO

40 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Homo sapiens

(vii) IMMEDIATE SOURCE:
(B) CLONE: IGKC 2p12
45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:73:

50 AAAGCAGACT ACGAGAAACA CAAA 24

(2) INFORMATION FOR SEQ ID NO:74:

5 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 24 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

10 (ii) MOLECULE TYPE: DNA (genomic)

(iii) HYPOTHETICAL: NO

(iv) ANTI-SENSE: NO

15 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Homo sapiens

20 (vii) IMMEDIATE SOURCE:
(B) CLONE: IGKC 2p12

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:74:

25 TCTACGCCTG CGAAGTCACC CATC 24

(2) INFORMATION FOR SEQ ID NO:75:

30 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 24 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

35 (ii) MOLECULE TYPE: DNA (genomic)

(iii) HYPOTHETICAL: NO

(iv) ANTI-SENSE: NO

40 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Homo sapiens

45 (vii) IMMEDIATE SOURCE:
(B) CLONE: IGKC 2p12

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:75:

50 GATGGGTGAC TTCGCAGGCG TAGA 24

(2) INFORMATION FOR SEQ ID NO:76:

- 5 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 24 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
- 10 (ii) MOLECULE TYPE: DNA (genomic)
- (iii) HYPOTHETICAL: NO
- (iv) ANTI-SENSE: NO
- 15 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Homo sapiens
- (vii) IMMEDIATE SOURCE:
(B) CLONE: IGKC 2p12
- 20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:76:

25 TTTGTGTTTC TCGTAGTCTG CTTT 24

(2) INFORMATION FOR SEQ ID NO:77:

- 30 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 24 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
- 35 (ii) MOLECULE TYPE: DNA (genomic)
- (iii) HYPOTHETICAL: NO
- (iv) ANTI-SENSE: NO
- 40 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Homo sapiens
- (vii) IMMEDIATE SOURCE:
(B) CLONE: ILIB 2q3-q21
- 45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:77:

50 CTCCTGCAAT TGACAGAGAG CTCC 24

(2) INFORMATION FOR SEQ ID NO:78:

- 5 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 24 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
- 10 (ii) MOLECULE TYPE: DNA (genomic)
- (iii) HYPOTHETICAL: NO
- (iv) ANTI-SENSE: NO
- 15 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Homo sapiens
- (vii) IMMEDIATE SOURCE:
20 (B) CLONE: ILIB 2q3-q21

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:78:

25 GAGGCAGAGA ACAGCACCCA AGGT 24

(2) INFORMATION FOR SEQ ID NO:79:

- 30 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 24 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
- 35 (ii) MOLECULE TYPE: DNA (genomic)
- (iii) HYPOTHETICAL: NO
- (iv) ANTI-SENSE: NO
- 40 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Homo sapiens
- (vii) IMMEDIATE SOURCE:
45 (B) CLONE: ILIB 2q3-q21

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:79:

50 ACCTTGGGTG CTGTTCTCTG CCTC 24

(2) INFORMATION FOR SEQ ID NO:80:

- 5 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 24 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
- 10 (ii) MOLECULE TYPE: DNA (genomic)
- (iii) HYPOTHETICAL: NO
- (iv) ANTI-SENSE: NO
- 15 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Homo sapiens
- (vii) IMMEDIATE SOURCE:
(B) CLONE: ILIB 2q3-q21
- 20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:80:

25 GGAGCTCTCT GTCAATTGCA GGAG 24

(2) INFORMATION FOR SEQ ID NO:81:

- 30 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 24 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
- 35 (ii) MOLECULE TYPE: DNA (genomic)
- (iii) HYPOTHETICAL: NO
- (iv) ANTI-SENSE: NO
- 40 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Homo sapiens
- (vii) IMMEDIATE SOURCE:
(B) CLONE: LDLR 19p13.3
- 45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:81:

50 CTCCATCTCA AGCATCGATG TCAA 24

(2) INFORMATION FOR SEQ ID NO:82:

- 5 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 24 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

10 (ii) MOLECULE TYPE: DNA (genomic)

(iii) HYPOTHETICAL: NO

(iv) ANTI-SENSE: NO

15 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Homo sapiens

(vii) IMMEDIATE SOURCE:
(B) CLONE: LDLR 19p13.3
20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:82:

25 GGGGGCAACC GGAAGACCAT CTTG 24

(2) INFORMATION FOR SEQ ID NO:83:

- 30 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 24 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

35 (ii) MOLECULE TYPE: DNA (genomic)

(iii) HYPOTHETICAL: NO

(iv) ANTI-SENSE: NO

40 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Homo sapiens

(vii) IMMEDIATE SOURCE:
(B) CLONE: LDLR 19p13.3
45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:83:

50 CAAGATGGTC TTCCGGTTGC CCCC 24

(2) INFORMATION FOR SEQ ID NO:84:

- 5 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 24 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
- 10 (ii) MOLECULE TYPE: DNA (genomic)
- (iii) HYPOTHETICAL: NO
- (iv) ANTI-SENSE: NO
- 15 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Homo sapiens
- (vii) IMMEDIATE SOURCE:
(B) CLONE: LDLR 19p13.3
- 20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:84:

25 TTGACATCGA TGCTTGAGAT GGAG 24

(2) INFORMATION FOR SEQ ID NO:85:

- 30 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 24 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
- 35 (ii) MOLECULE TYPE: DNA (genomic)
- (iii) HYPOTHETICAL: NO
- (iv) ANTI-SENSE: NO
- 40 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Homo sapiens
- (vii) IMMEDIATE SOURCE:
(B) CLONE: MET-H 7q31
- 45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:85:

50 GTTTGGTCTA AGTTGCTGAT TACC 24

(2) INFORMATION FOR SEQ ID NO:86:

5 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 24 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

10 (ii) MOLECULE TYPE: DNA (genomic)

(iii) HYPOTHETICAL: NO

(iv) ANTI-SENSE: NO

15 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Homo sapiens

(vii) IMMEDIATE SOURCE:
(B) CLONE: MET-H 7q31

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:86:

25 GGATTTTCT GACGATCTTT CAAC 24

(2) INFORMATION FOR SEQ ID NO:87:

30 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 24 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

35 (ii) MOLECULE TYPE: DNA (genomic)

(iii) HYPOTHETICAL: NO

(iv) ANTI-SENSE: NO

40 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Homo sapiens

(vii) IMMEDIATE SOURCE:
(B) CLONE: MET-H 7q31

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:87:

50 GTTGAAAGAT CGTCAGAAAA ATCC 24

(2) INFORMATION FOR SEQ ID NO:88:

- 5 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 24 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
- 10 (ii) MOLECULE TYPE: DNA (genomic)
- (iii) HYPOTHETICAL: NO
- (iv) ANTI-SENSE: NO
- 15 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Homo sapiens
- (vii) IMMEDIATE SOURCE:
(B) CLONE: MET-H 7q31
- 20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:88:

25 GGTAATCAGC AACTTAGACC AAAC 24

(2) INFORMATION FOR SEQ ID NO:89:

- 30 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 24 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
- 35 (ii) MOLECULE TYPE: DNA (genomic)
- (iii) HYPOTHETICAL: NO
- (iv) ANTI-SENSE: NO
- 40 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Homo sapiens
- (vii) IMMEDIATE SOURCE:
(B) CLONE: PROC 2q13-q21
- 45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:89:

50 GCTGACAGCG GCCCACTGCA TGGA 24

(2) INFORMATION FOR SEQ ID NO:90:

- 5 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 24 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
- 10 (ii) MOLECULE TYPE: DNA (genomic)
- (iii) HYPOTHETICAL: NO
- (iv) ANTI-SENSE: NO
- 15 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Homo sapiens
- (vii) IMMEDIATE SOURCE:
(B) CLONE: PROC 2q13-q21
- 20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:90:

25 GAGTCCAAGA AGCTCCTTGT CAGG 24

(2) INFORMATION FOR SEQ ID NO:91:

- 30 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 24 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
- 35 (ii) MOLECULE TYPE: DNA (genomic)
- (iii) HYPOTHETICAL: NO
- (iv) ANTI-SENSE: NO
- 40 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Homo sapiens
- (vii) IMMEDIATE SOURCE:
(B) CLONE: PROC 2q13-q21
- 45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:91:

50 CCTGACAAGG AGCTTCTTGG ACTC 24

(2) INFORMATION FOR SEQ ID NO:92:

- 5 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 24 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
- 10 (ii) MOLECULE TYPE: DNA (genomic)
- (iii) HYPOTHETICAL: NO
- (iv) ANTI-SENSE: NO
- 15 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Homo sapiens
- (vii) IMMEDIATE SOURCE:
(B) CLONE: PROC 2q13-q21
- 20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:92:

TCCATGCAGT GGGCCGCTGT CAGC

24

25 (2) INFORMATION FOR SEQ ID NO:93:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 24 base pairs
(B) TYPE: nucleic acid
30 (C) STRANDEDNESS: single
(D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA (genomic)
- 35 (iii) HYPOTHETICAL: NO
- (iv) ANTI-SENSE: NO
- (vi) ORIGINAL SOURCE:
40 (A) ORGANISM: Homo sapiens
- (vii) IMMEDIATE SOURCE:
(B) CLONE: MET-H 7q31
- 45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:93:

CATCCATGTA GGAGAGCCTT AGTC

24

(2) INFORMATION FOR SEQ ID NO:94:

- 5 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 26 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
- 10 (ii) MOLECULE TYPE: DNA (genomic)
- (iii) HYPOTHETICAL: NO
- 15 (iv) ANTI-SENSE: NO
- (vi) ORIGINAL SOURCE:
(A) ORGANISM: Homo sapiens
- 20 (vii) IMMEDIATE SOURCE:
(B) CLONE: MET-H 7q31
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:94:

25 CCATTTTGT GTCTTCTAGT CTAAGG

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(2) INFORMATION FOR SEQ ID NO:95:

- 30 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 23 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
- 35 (ii) MOLECULE TYPE: DNA (genomic)
- (iii) HYPOTHETICAL: NO
- (iv) ANTI-SENSE: NO
- 40 (vi) ORIGINAL SOURCE:
(A) ORGANISM: Homo sapiens
- (vii) IMMEDIATE SOURCE:
(B) CLONE: MET-H 7q31
- 45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:95:

TTGAAAGATC GTCAGAAAAA TCC

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